

# CDP-C301M/C305M

## SERVICE MANUAL

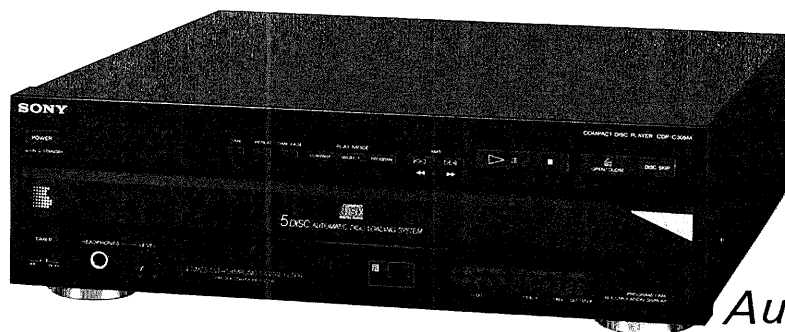


Photo: CDP-C305M

*US Model*  
CDP-C301M

*AEP Model*

*UK Model*

CDP-C301M/C305M

*E Model*

CDP-C305M

*Australian Model*

CDP-C305M

Model Name Using Similar Mechanism	CDP-C500M
Base Unit Name	BU-5C/BU-5M

### SPECIFICATIONS

	CDP-C305M	CDP-C301M
System	Compact disc digital audio system	
Laser	Semiconductor laser ( $\lambda = 780 \text{ nm}$ ) Emission duration: continuous	
Laser output	Max. $44.6 \mu\text{W}^*$ * This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.	
Frequency response	2 Hz – 20 kHz ( $\pm 1.0_{1.2} \text{ dB}$ )	
Signal to noise ratio	More than 93 dB	
Dynamic range	More than 90 dB	
Harmonic distortion	Less than 0.05% (1 kHz)	
Channel separation	More than 90 dB (1 kHz)	
Wow and flutter	Below measurable limit	
Outputs	Output level 2 V (at 50 kilohms) Load impedance over 10 kilohms	
LINE OUT (phono jacks)		
HEADPHONES (stereo phone jack)	Output level 0 – 10 mW (variable) (at 32 ohms)	

### General

Power requirements	US model: 120 V AC, 60 Hz UK, Australian model: 240 V AC, 50/60 Hz AEP model: 220 V AC, 50/60 Hz E model: 110 – 120 or 220 – 240 V AC adjustable, 50/60 Hz
Power consumption	11 W
Dimensions (not including projecting parts and controls)	Approx. 355 × 110 × 385 mm (w/h/d) (14 × 4 $\frac{3}{8}$ × 15 $\frac{1}{4}$ inches)
Weight	Approx. 5.0 kg (11 lbs)

### Supplied accessories

	CDP-C305M	CDP-C301M
Audio signal connecting cord	1 (phono plug × 2 ↔ phono plug × 2)	
AC plug adaptor	1 (for other countries and EC only)	
Remote commander	1	
R6 (size AA) batteries	2	

Design and specifications subject to change without notice.

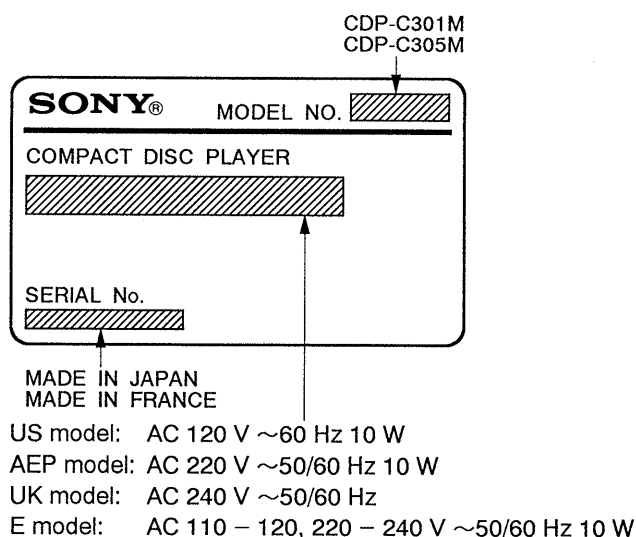
COMPACT DISC PLAYER  
**SONY**<sup>®</sup>

## TABLE OF CONTENTS



<u>Section</u>	<u>Title</u>	<u>Page</u>
Specifications .....		1
Safety Check-out .....		2
<b>1. SERVICING NOTES</b>		
Front Panel Assembly Removing .....		3
Notes on Handling the Optical Pick-up		
Block or Base Unit .....		3
Notes on Laser Diode Emission Check .....		3
Laser Diode and Focus Search		
Operation Check .....		3
Notes on the Transit Key .....		3
Protection of Eyes from Laser Beam		
during Servicing .....		4
<b>2. GENERAL</b> .....		5
<b>3. ELECTRICAL ADJUSTMENTS</b> .....		6
<b>4. DIAGRAMS</b>		
4-1. Block Diagram .....		8
4-2. Printed Wiring Boards .....		11
4-3. Schematic Diagram .....		15
<b>5. EXPLODED VIEWS</b> .....		19
<b>6. ELECTRICAL PARTS LIST</b> .....		23

## MODEL IDENTIFICATION

— Specification Labels —



## SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK  OR DOTTED LINE WITH MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

## SAFETY CHECK-OUT

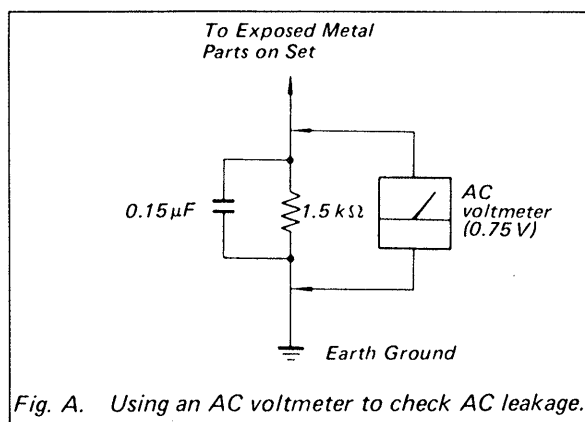
After correcting the original service problem, perform the following safety check before releasing the set to the customer:

Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage. Check leakage as described below.


## LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers' instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2V AC range are suitable. (See Fig. A)



## ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE  SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

## SECTION 1

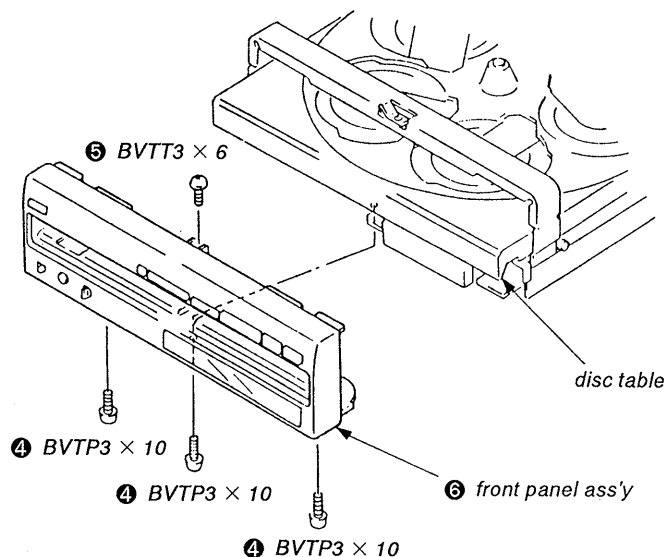
### SERVICING NOTES

#### Front Panel Assembly Removing

**Note:** Follow the disassembly procedure in the numerical order given.

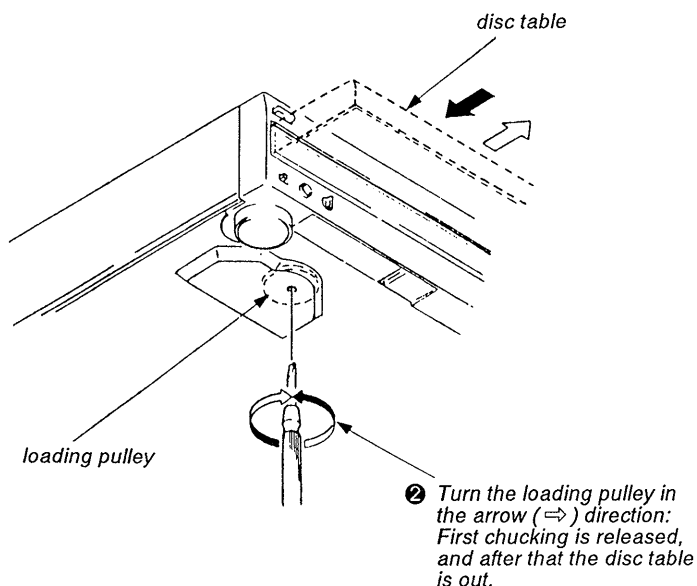
#### When the power can be supplied

- ① Unscrew 6 stopper screws and remove the upper cover.
- ② Turn the power on.
- ③ Push OPEN/CLOSE button and open the disc table.



#### When the power cannot be supplied

- ① Unscrew 6 stopper screws and remove the upper cover.
- ③ Perform items ④ to ⑥ of "When the power can be supplied."



#### NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

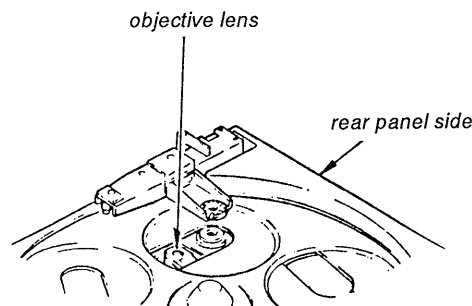
The laser diode in the optical pick-up block may suffer electrostatic breakdown because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body. During repair, pay attention to electrostatic breakdown and also use the procedure in the printed matter which is included in the repair parts. The flexible board is easily damaged and should be handled with care.

#### NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe more than 30 cm away from the objective lens.

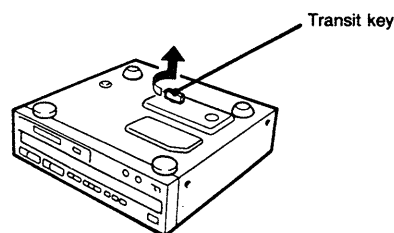
#### [Laser Diode and Focus Search Operation Check]

When turning on the power with no disc, confirm the following operation.



- ① Confirm the laser beam is spread.
- ② The objective lens moves up and down once.

#### Note on the Transit Key



The white transit key on the bottom exterior of the unit protects the optical system against shock during transportation. Before operating the CD player, be sure to remove the key by following the instructions on the label, and store it in a safe place.

When transporting the unit, replace the key in its original hole and lock it in place.

## PROTECTION OF EYES FROM LASER BEAM DURING SERVICING

This set employs a laser. Therefore, be sure to follow carefully the instructions below when servicing.

### CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

#### 1. Laser Diode Properties

- Material: GaAlAs
- Wavelength: 780 nm
- Emission Duration: continuous
- Laser Output: max. 44.6  $\mu$ W\*

\* This output is the value measured at a distance of about 200 mm from the objective lens surface on the Optical Pick-up Block.

2. During service, do not take the Optical Pick-up Block apart, and do not adjust the APC circuit. If there is a breakdown in the APC circuit (including laser diode), replace the entire Optical Pick-up Block (including APC board).

## BESKYTTELSE AF ØJNE MOD LASERSTRÅLING UNDER SERVICE

I dette apparat anvendes laserlys. Derfor skal nedenstående instruktioner nøje følges under service.

Følg iverigt instruktionerne i servicemanualen.

### ADVARSEL!!

Under service må øjnene ikke komme nær objektiv-linsen på den optiske pick-up enhed. I tilfælde af at det er nødvendigt at kontrollere udsendelsen af laserlys, skal det ske i en afstand af mere end 25 cm fra den optiske pick-up.

#### 1. Laser-dioe data

- Materiale: GaAlAs
- Bølgelængde: 780 nm
- Udstråling: Kontinuerlig
- Laseroutput: Max. 0,4 mW\*

\* Målt i 1,6 mm afstand fra overfladen af objektiv-linsen på den optiske pick-up enhed.

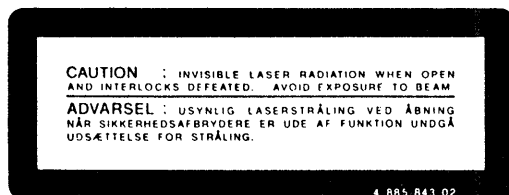
- Klassifikation: Klasse IIIb.

2. Adskil aldrig den optiske pick-up enhed under service, og juster ikke APC kredsløbet (Automatic Power Control). Hvis APC kredsløbet (incl. laserdioden) bryder ned, skal hele den optiske pick-up enhed (incl. APC printkortet) udskiftes.

## LASER ADVARSEL MÆRKNING

Følgende mærkning findes indvendig i apparatet:

#### 1. Advarsel Mærkning

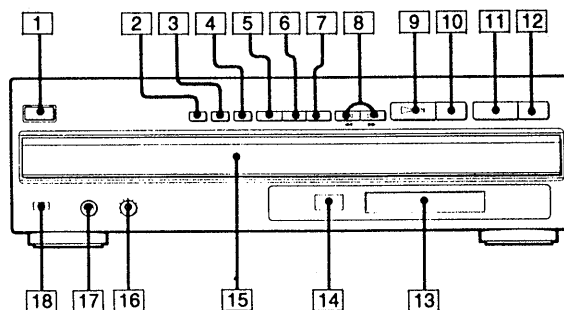


**VAROITUS:** Laite sisältää, laserdiodin, joka lähettää (näkömätöntä) silmille vaarallista lasersäteilyä.

## SECTION 2

### GENERAL

CDP-C305M

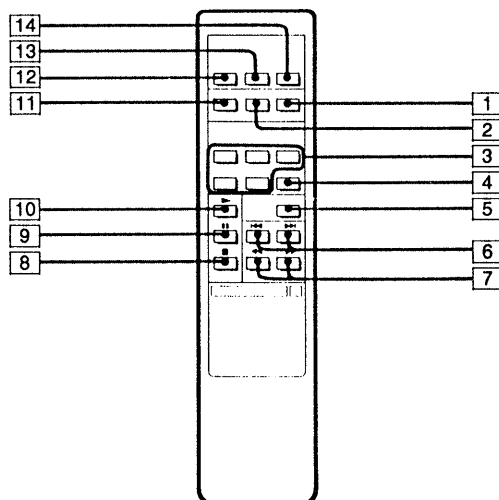


- 1 POWER switch
- 2 TIME button
- 3 REPEAT button
- 4 TIME FADE button
- 5 CONTINUE button
- 6 SHUFFLE button
- 7 PROGRAM button
- 8 ◀◀◀◀▶▶▶▶ (AMS\*/RMS\*/manual search) buttons
- 9 ▶▶ (play/pause) button
- 10 ■ (stop) button

- 11 ▲ OPEN/CLOSE button
- 12 DISC SKIP button
- 13 Display window
- 14 Remote sensor
- 15 Disc tray
- 16 (Headphones) LEVEL control (CDP-C305M only)
- 17 HEADPHONES jack (CDP-C305M only)
- 18 TIMER switch

\* AMS is the abbreviation of Automatic Music Sensor.  
 \*\* RMS is the abbreviation of Random Music Sensor.

RM-D306 (CDP-C305M)



- 1 MUSIC SCAN button
- 2 REPEAT button
- 3 DISC 1 - 5 buttons
- 4 DISC SKIP button
- 5 FADER button
- 6 ◀◀◀▶▶▶ (AMS) buttons
- 7 ◀◀▶▶▶ (manual search) buttons
- 8 ■ (stop) button
- 9 ▶▶ (pause) button
- 10 ▶ (play) button
- 11 TIME button
- 12 CONTINUE button
- 13 SHUFFLE button
- 14 PGM (program) button

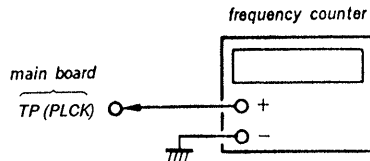
## SECTION 3

### ELECTRICAL ADJUSTMENTS

1. Perform adjustments in the order given.
2. Use YEDS-18 (Part No : 3-702-101-01) disc unless otherwise indicated.
3. Use the oscilloscope with more than 10 M $\Omega$  impedance.

#### RF PLL Free Run Frequency Adjustment/Lock Frequency Check

Procedure :

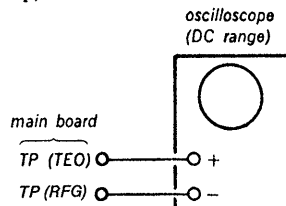


1. Put the set into test mode.
2. Connect test point TP (ASY) to ground with lead wire.
3. Turn POWER switch on.
4. Connect the frequency counter to test point TP (PLCK).
5. Adjust RV5 so that the reading on frequency counter is 4.3218 MHz  $\pm$  30 kHz.  
..... (RF PLL frequency adjustment)
6. Remove lead wire connecting TP (ASY) to ground.
7. Set disc (YEDS-18) and press  $\triangleright$  PLAY button.
8. Confirm that the reading on frequency counter is 4.3218 MHz.  
..... (Lock frequency check)
9. Turn POWER switch off.

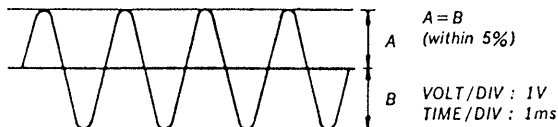
#### E-F Balance Adjustment

This adjustment should be made when replacing TOP (T-type Optical Pick-up).

Procedure :



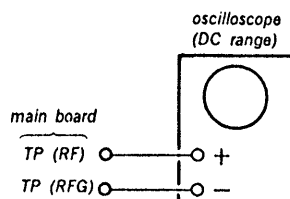
1. Put the set into test mode.
2. Connect test point TP (TES) and TP (ADJ) to ground with lead wire.
3. Connect oscilloscope to test point TP (TEO) and test point TP (RFG).
4. Set disc (YEDS-18) and turn POWER switch on.
5. Adjust RV1 so that the traverse waveform is symmetrical above and below.
6. Turn POWER switch off.
7. After adjustment, remove the lead wire connected in step 2.



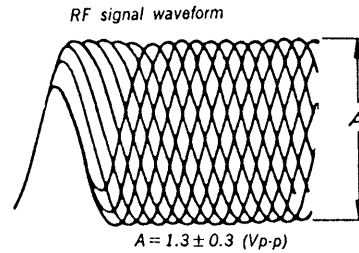
#### Focus Bias Adjustment

This adjustment should be made when replacing TOP (T-type Optical Pick-up).

Procedure :



1. Put the set into test mode.
2. Connect oscilloscope to test point TP (RF) and test point TP (RFG).
3. Set disc (YEDS-18) and turn POWER switch on.
4. Adjust RV2 for an optimum waveform eye pattern or so that the peak is maximum. Optimum eye pattern means that shape "◇" can be clearly distinguished at the center of the waveform.
5. Turn POWER switch off.



#### REFERENCE

##### Focus/Tracking Gain Adjustments

A frequency response analyzer is necessary in order to perform this adjustment exactly.

However, this gain has a margin, so even if it is slightly off, there is no problem. Therefore, do not perform this adjustment.

Focus/tracking gain determines the pick-up follow up (vertical and horizontal) relative to mechanical noise and shock when the 2-axis device operate.

However, as these reciprocate, the adjustment is at the point where both are satisfied.

- When gain is raised, the noise when the 2-axis device operates increases.
- When gain is lowered, mechanical shock and skipping occurs more easily.
- When gain adjustment is off, the symptoms below appear.

Symptoms \ Gain	Focus	Tracking
<ul style="list-style-type: none"> <li>• The time until music starts becomes longer for <math>\blacksquare</math> STOP <math>\rightarrow</math> <math>\triangleright</math> PLAY or automatic selection. (<math>\llcorner</math>, <math>\ggcorner</math> buttons pressed.) (Normally takes about 1 seconds.)</li> </ul>	low	low or high
<ul style="list-style-type: none"> <li>• Music does not start and disc continues to rotate for <math>\blacksquare</math> STOP <math>\rightarrow</math> <math>\triangleright</math> PLAY or automatic selection. (<math>\llcorner</math>, <math>\ggcorner</math> buttons pressed.)</li> </ul>	—	low
<ul style="list-style-type: none"> <li>• Sound is interrupted during PLAY or time counter display stops progressing.</li> </ul>	—	low
<ul style="list-style-type: none"> <li>• More noise during 2-axis device operation.</li> </ul>	high	high

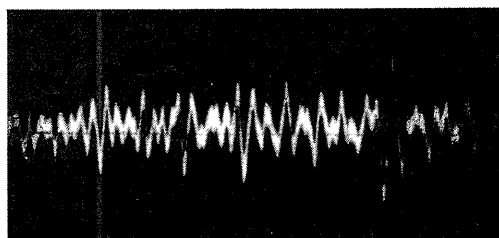
The following is a simple adjustment method.

#### — Primary Adjustment —

**Note :** Since exact adjustment cannot be performed, remember the positions of the controls before performing the adjustment. If the position after the primary adjustment are only a little different, return the controls to the original position.

#### Procedure :

1. Keep the set horizontal.  
(If the set is not horizontal, this adjustment cannot be performed due to the gravity against the 2-axis device.)
2. Put the set into test mode.
3. Set disc (YEDS-18) and turn POWER switch on.
4. Connect oscilloscope to main amp board TP (FEO).
5. Adjust RV3 so that the waveform is as shown in the figure below. (focus gain adjustment)

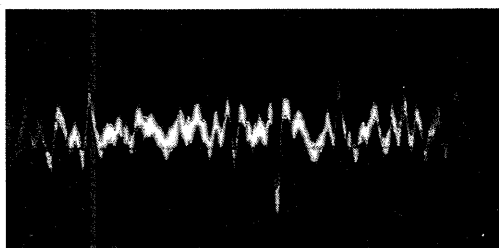


VOLT/DIV : 100mV  
TIME/DIV : 2mS

100mV  
0V

• Incorrect Examples (DC level changes more than on adjusted waveform)

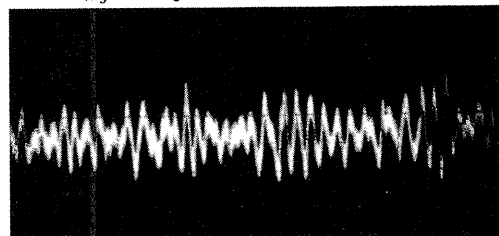
low focus gain



VOLT/DIV : 100mV  
TIME/DIV : 2mS

250mV  
0V

high focus gain

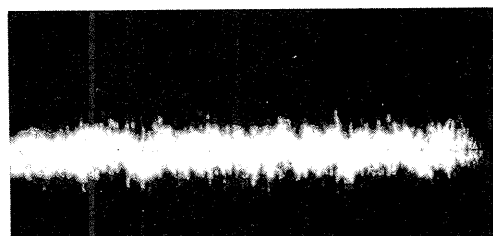


VOLT/DIV : 100mV  
TIME/DIV : 2mS

100mV  
75mV  
0V

RV3  
FOCUS  
GAIN

6. Connect oscilloscope to main board TP (TEO).
7. Adjust RV4 so that the waveform is as shown in the figure below. (tracking gain adjustment)
8. Turn POWER switch off.

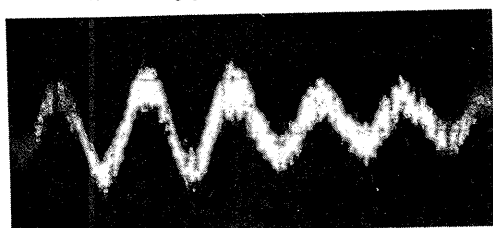


VOLT/DIV : 1V  
TIME/DIV : 2mS

0V

• Incorrect Examples (fundamental wave appears)

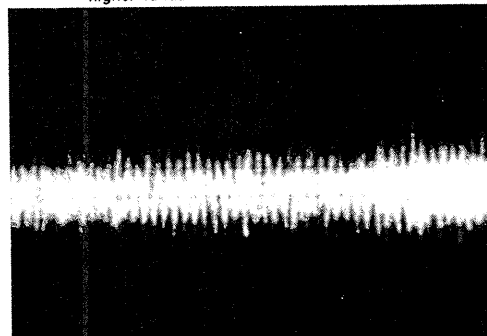
low tracking gain



VOLT/DIV : 1V  
TIME/DIV : 2mS

0V

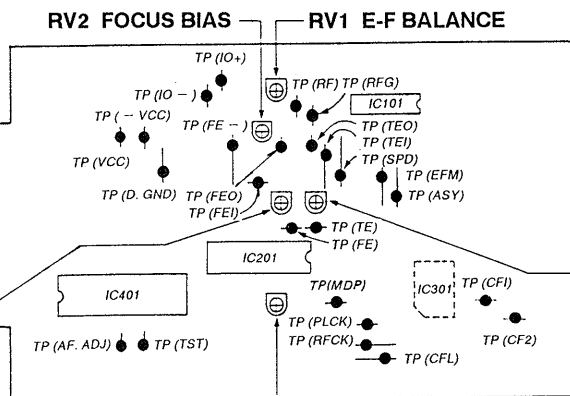
high tracking gain  
higher fundamental wave than for low gain)



VOLT/DIV : 1V  
TIME/DIV : 2mS

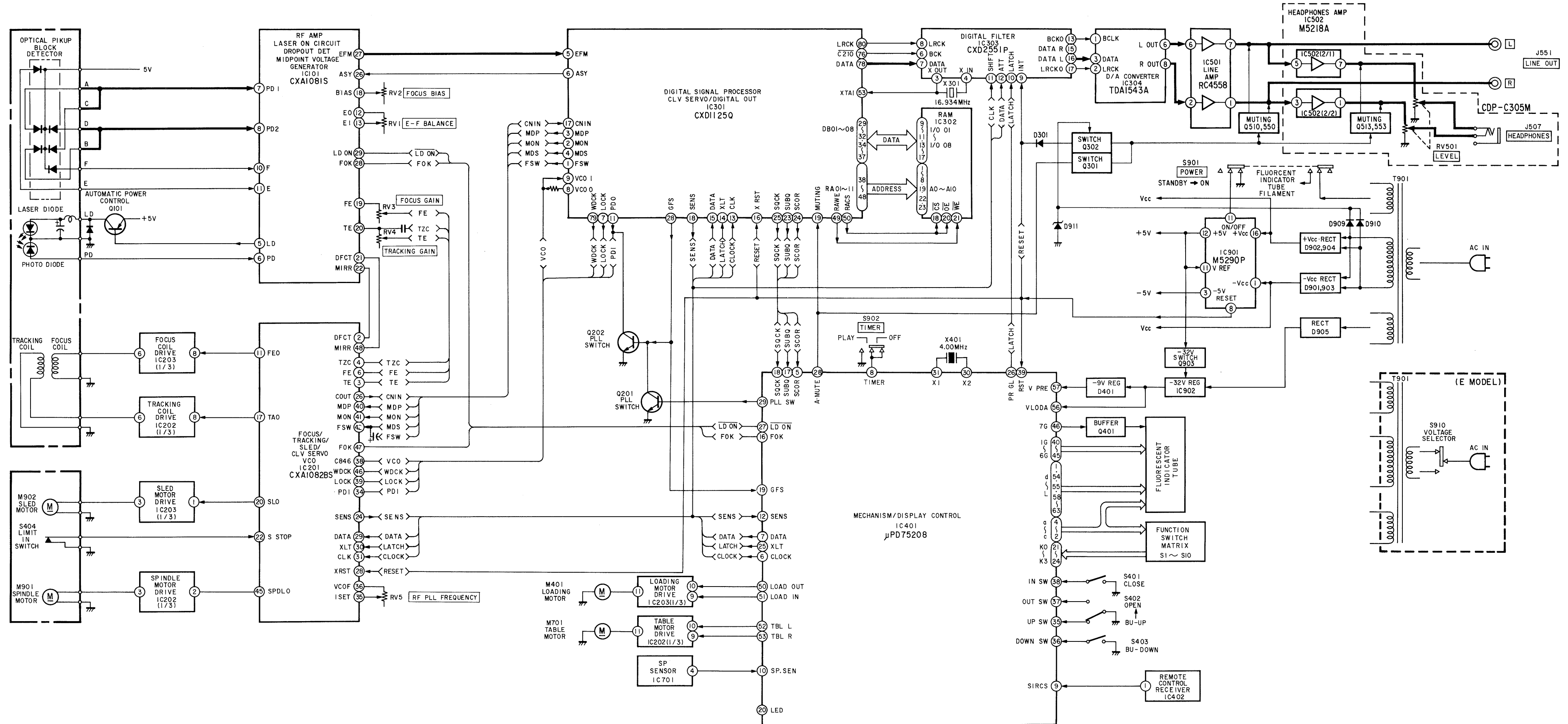
0V

Adjustment Location : main board



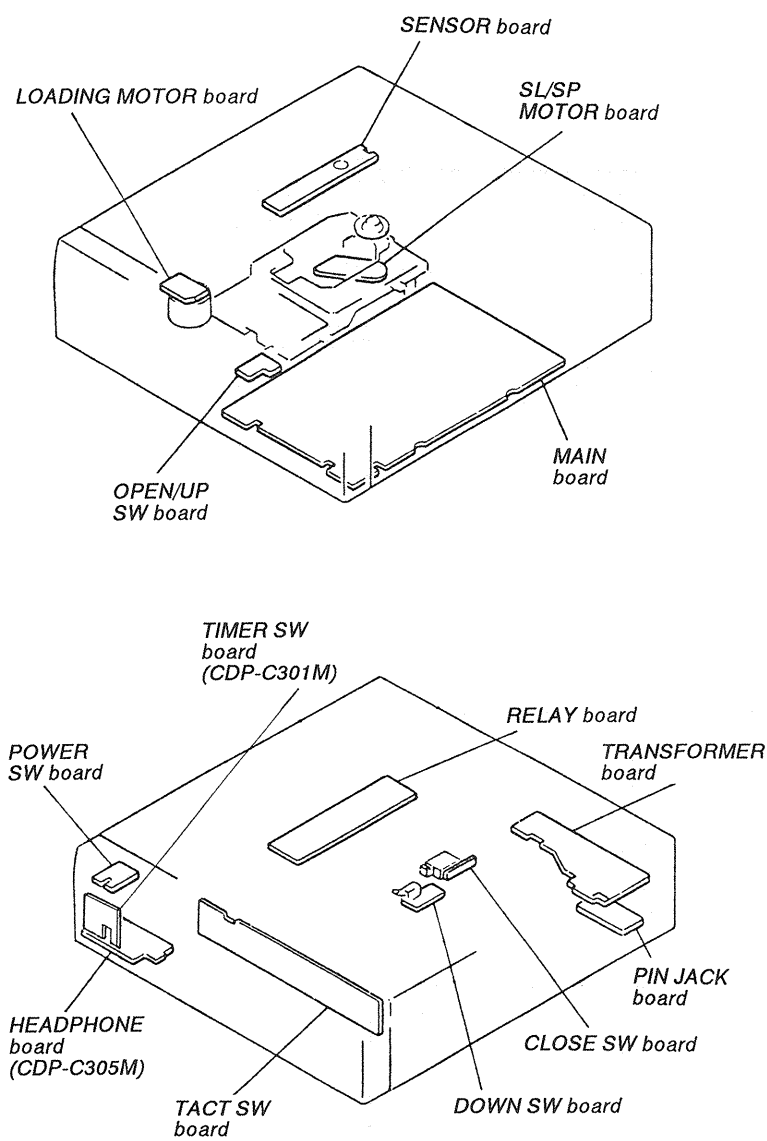
RV4  
TRACKING  
GAIN

RV5 RF PLL FREE RUN FREQUENCY

SECTION 4  
DIAGRAMS



- **Circuit Boards Location**

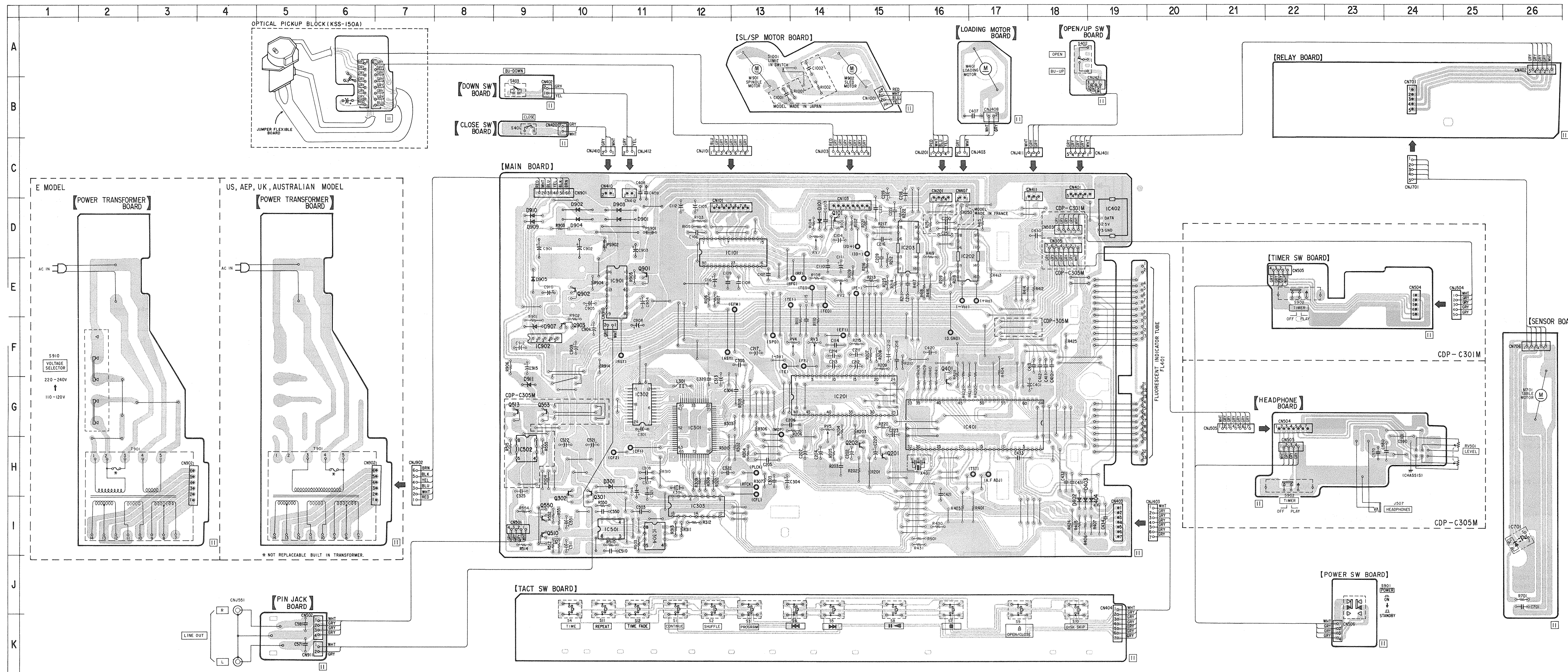


- **Semiconductor Location**

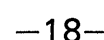
Ref. No.	Location	Ref. No.	Location
D101	D-14	IC401	G-17
D301	H-10	IC402	D-19
D402	I-18	IC501	I-10
D403	I-18	IC502	H-9
D404	I-19	IC701	I-26
D901	D-11	IC901	E-11
D902	D-10	IC902	F-9
D903	D-11		
D904	D-10	Q101	D-14
D905	E-9	Q201	H-15
D907	F-9	Q202	H-15
D909	D-9	Q301	I-10
D910	D-9	Q302	I-10
D911	G-9	Q401	G-16
		Q510	I-9
IC101	D-12	Q513	G-9
IC202	G-14	Q550	I-9
IC202	D-16	Q553	G-9
IC203	D-15	Q901	E-11
IC301	G-12	Q902	E-10
IC302	G-11	Q903	F-10
IC303	I-12		
IC304	I-11		

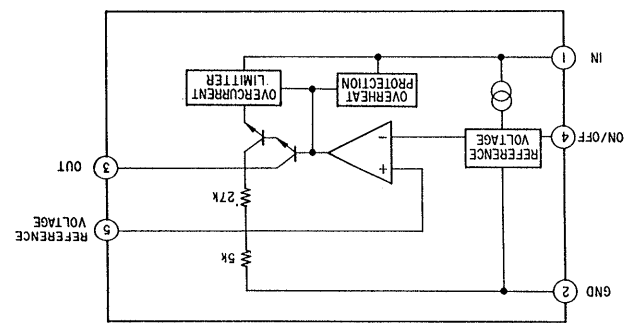
**Note:**

- ○ — : parts extracted from the component side.
- ■ : parts mounted on the conductor side.
- □ ← : indicates side identified with part number.

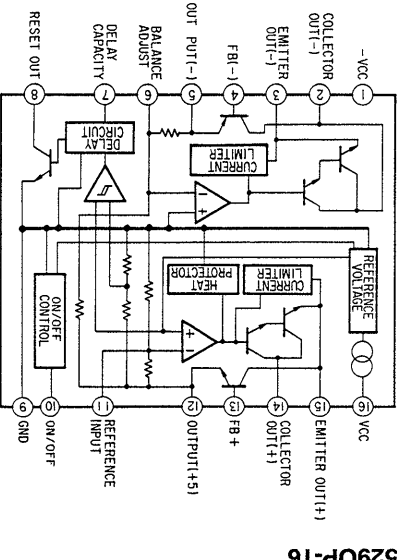




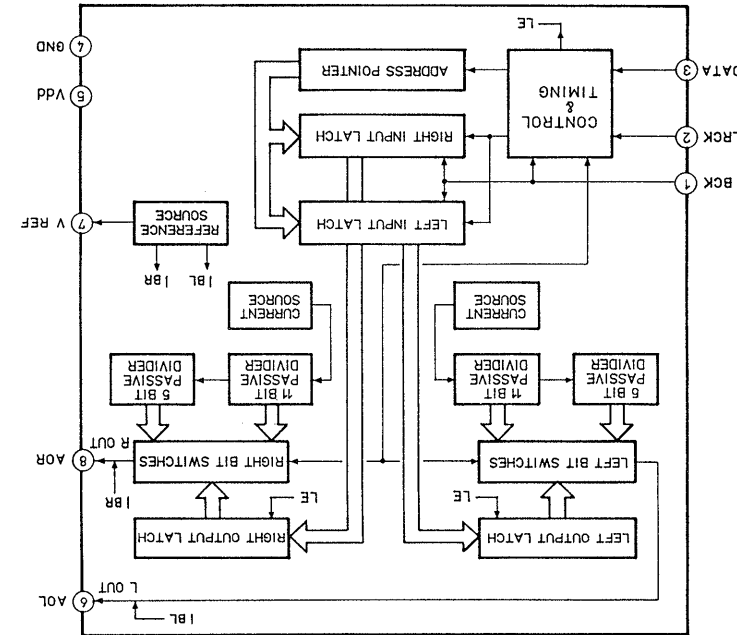




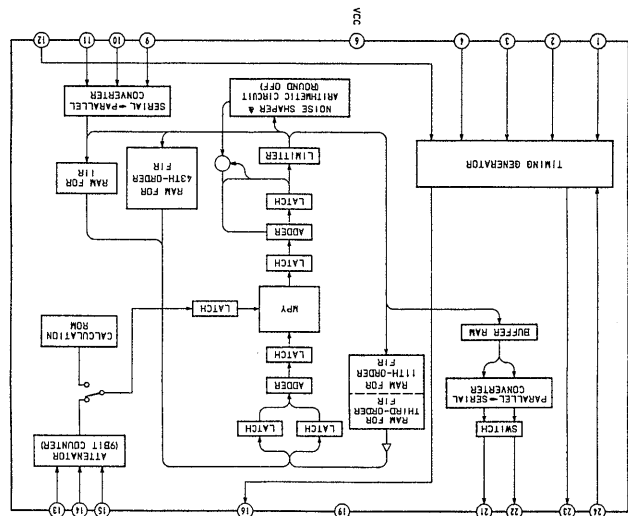
IC902  
MS293L



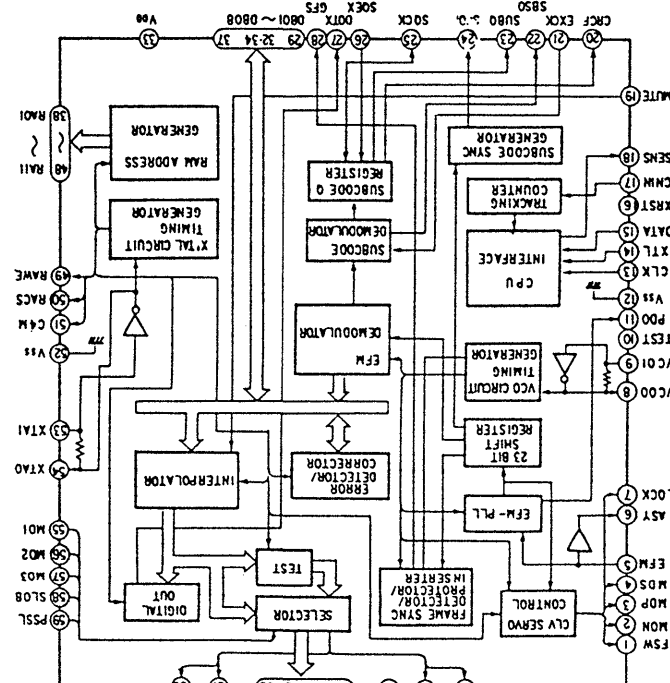
IC901  
MS290P-16



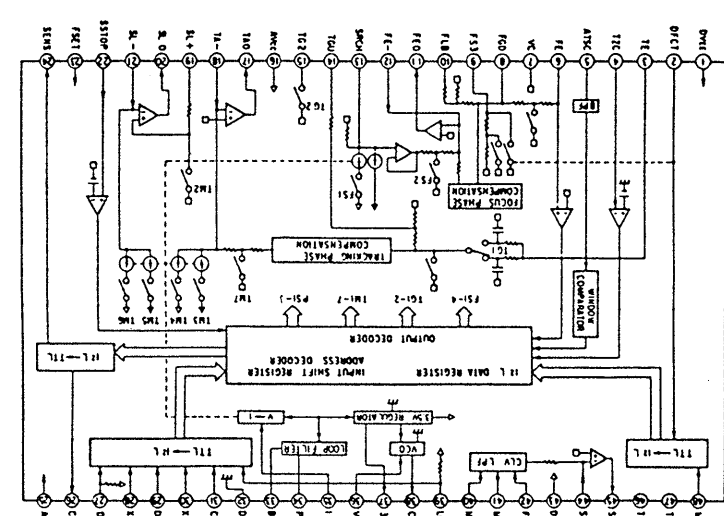
IC304  
TDA1543A



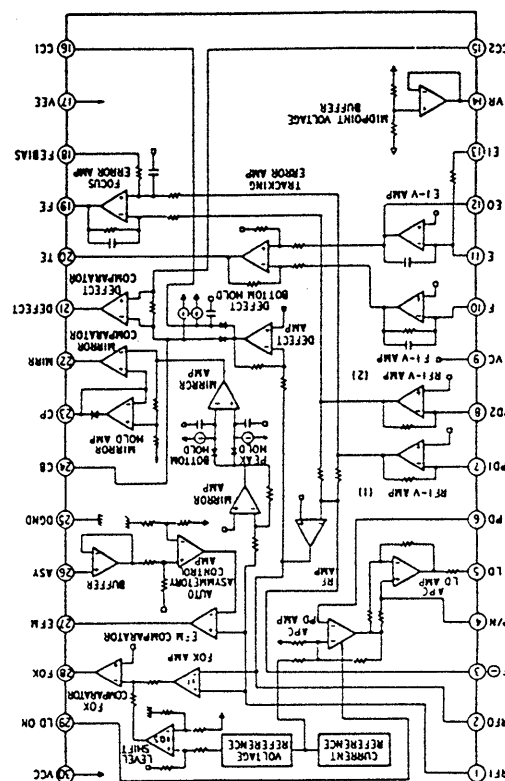
IC303  
CXD2551P



IC301  
CXD1250



IC201  
CXA1082BS





IC101  
CXA1081S

## SECTION 5 EXPLODED VIEWS

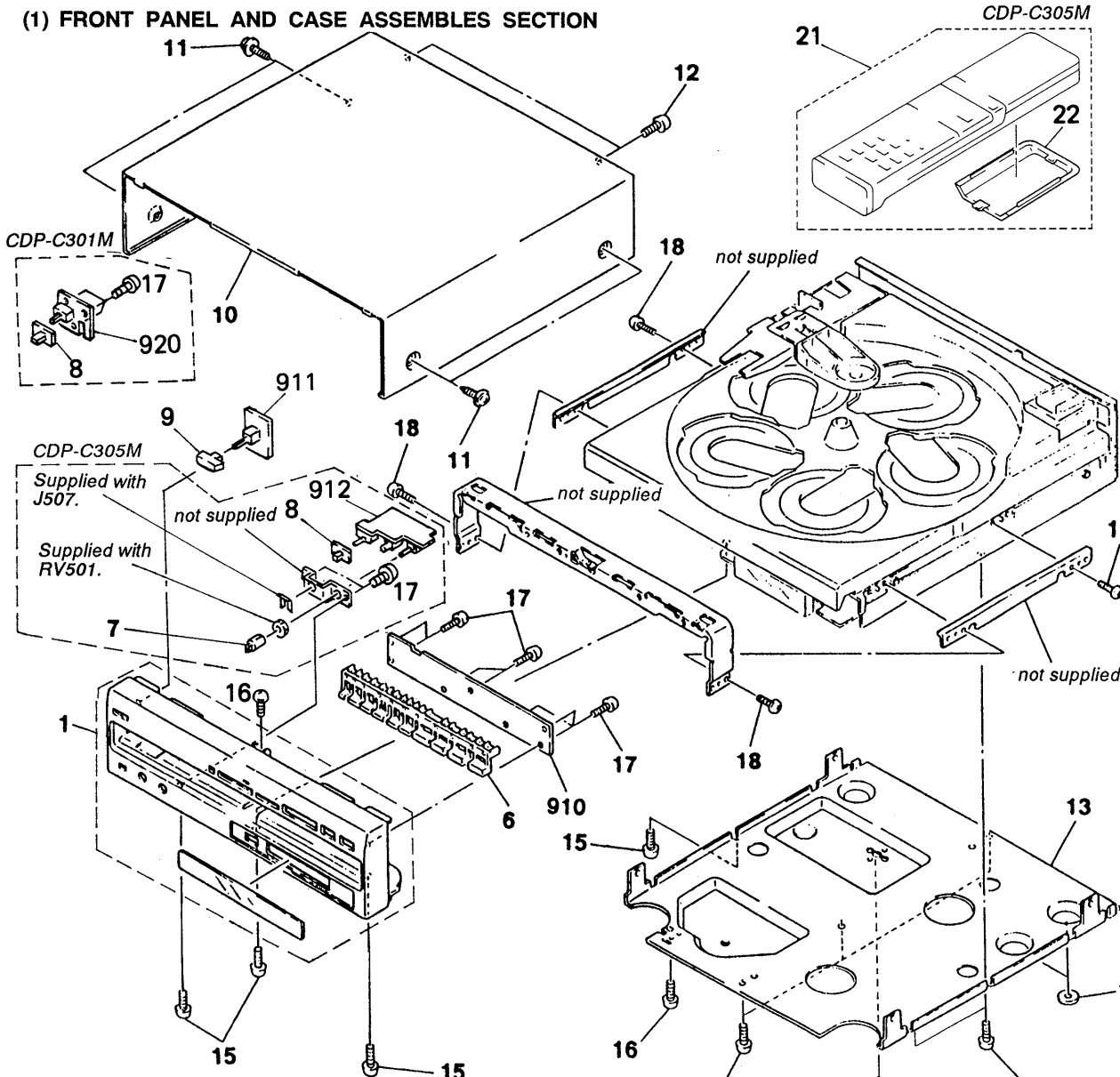
### NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "X" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts Example:  
(RED) ... KNOB, BALANCE (WHITE)  
↑ Cabinet's Color      ↑ Parts Color

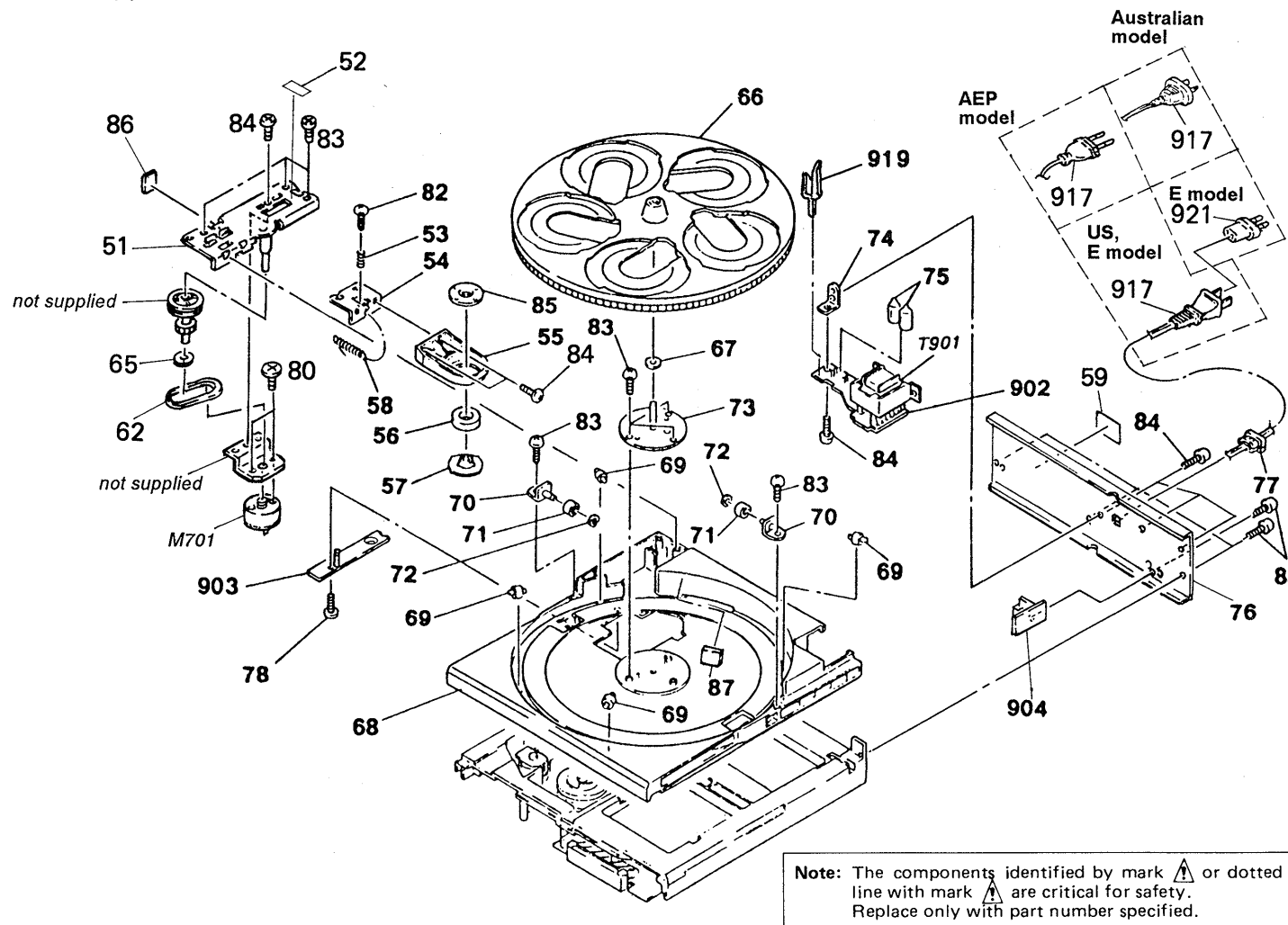
The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

### (1) FRONT PANEL AND CASE ASSEMBLY SECTION



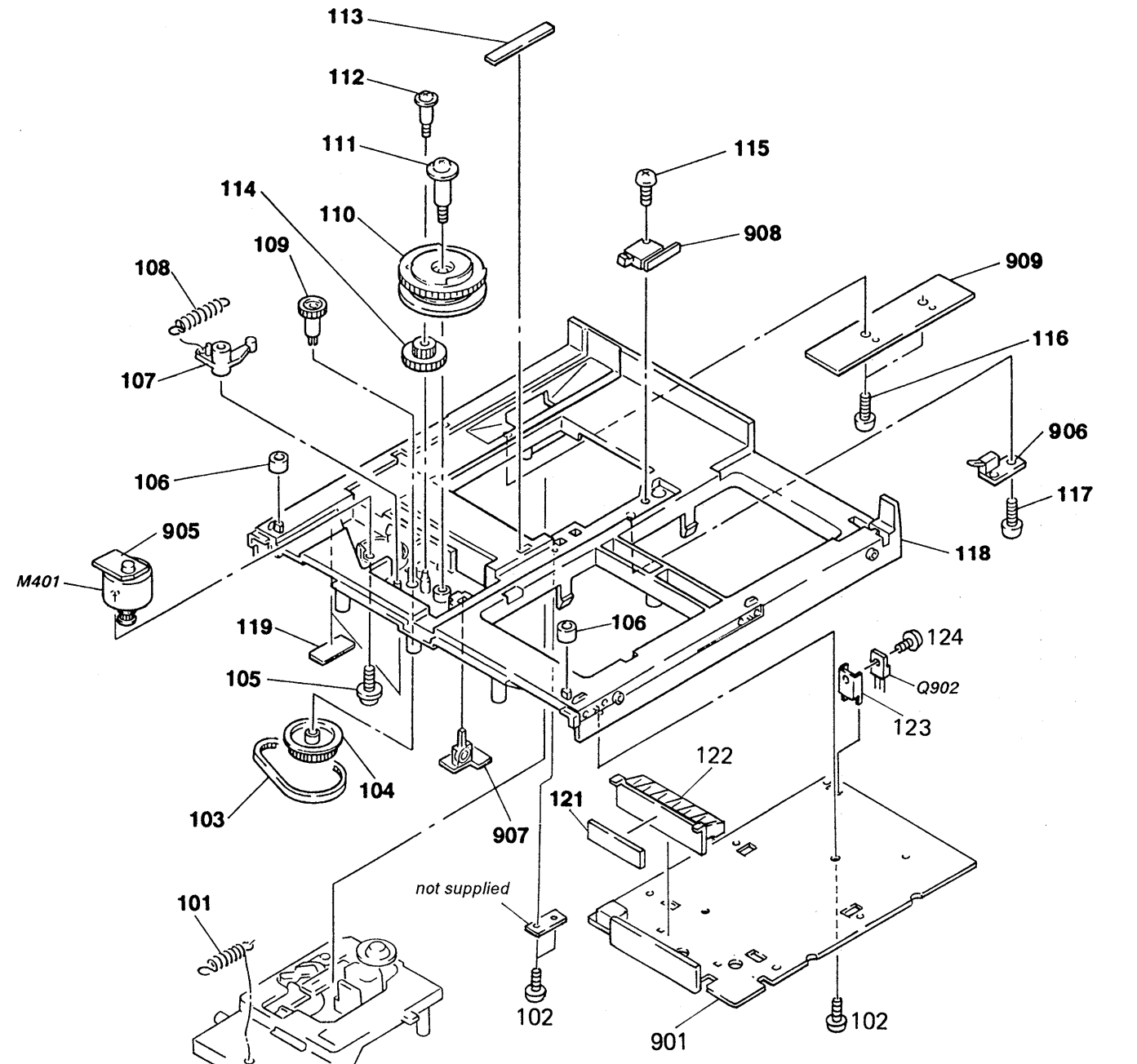
No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	X-4924-458-1	(C301M:AEP UK:GRAY)...PANEL ASSY, FRONT		17	4-928-635-01	SCREW, +BV (2.6X8) TAPPING	
7	X-4924-460-1	(C305M:BLACK)...PANEL ASSY, FRONT		18	7-685-648-79	SCREW +BTP 3X12 TYPE2 N-S	
8	X-4924-461-1	(C305M:GRAY)...PANEL ASSY, FRONT		20	*4-924-418-01	PLATE (TRANSPORT)...LOCK	
9	X-4924-471-1	(C301M:US)...PANEL ASSY, FRONT		21	1-465-398-11	(M305M)...COMMANDER, REMOTE (RM-0306)	
6	4-934-356-01	BUTTON (C305M)...KNOB (A TYPE), LOV		22	2-181-754-01	(C305M)...COVER, BATTERY	
7	4-922-531-11	BUTTON (C305M)...KNOB (A TYPE), LOV		910	*1-634-981-11	(MADE IN FRANCE)...PC BOARD, TACT SW	
8	4-922-518-01	BUTTON (C305M)...KNOB (A TYPE), LOV		73	*1-635-062-11	(MADE IN JAPAN)...PC BOARD, TACT SW	
9	4-922-903-01	BUTTON (C305M)...KNOB (A TYPE), LOV		911	*1-634-988-11	(MADE IN FRANCE)...PC BOARD, POWER SW	
10	4-930-534-01	(BLACK:MADE IN JAPAN)...CASE		912	*1-634-989-11	(C305M:MADE IN FRANCE)...PC BOARD, POWER SW	
11	4-930-534-11	(GRAY:MADE IN JAPAN)...CASE		913	*1-635-070-11	(C305M:MADE IN JAPAN)...PC BOARD, HEADPHONE	
12	4-930-534-31	(GRAY:MADE IN JAPAN)...CASE		920	*1-634-979-11	(C301M:MADE IN FRANCE)...PC BOARD, HEADPHONE	
13	3-704-366-21	SCREW (CASE) (M3X10)					
14	3-703-685-21	SCREW (+BV 3X8)					
15	*4-924-438-01	PLATE (M), BOTTOM					
16	4-924-410-01	FELT					
17	7-685-647-79	SCREW +BTP 3X10 TYPE2 N-S					
18	7-685-647-79	SCREW +BTP 3X10 TYPE2 N-S					
19	7-685-647-79	SCREW +BTP 3X10 TYPE2 N-S					
20	7-685-647-79	SCREW +BTP 3X10 TYPE2 N-S					
21	7-685-647-79	SCREW +BTP 3X10 TYPE2 N-S					
22	7-685-647-79	SCREW +BTP 3X10 TYPE2 N-S					

### (2) DISC TABLE ASSEMBLY SECTION



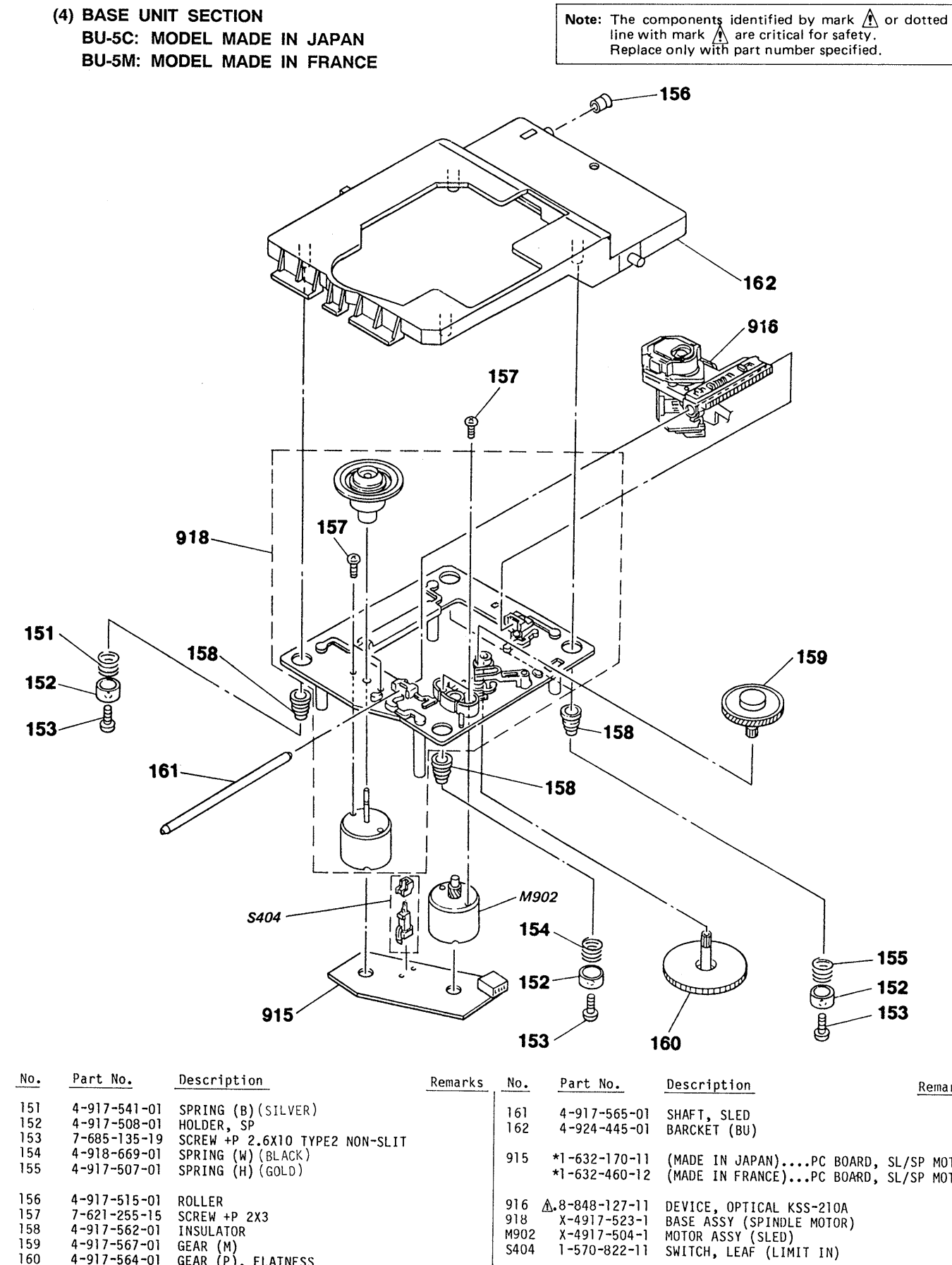
No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
51	*X-4924-472-1	BRACKET (R GEAR) ASSY		78	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 N-S	
52	3-831-441-XX	SPACER		80	7-621-775-08	SCREW +P 2.6X3	
53	4-924-477-01	SPRING, COMPRESSION		82	7-682-548-09	SCREW +B 3X8	
54	*4-926-328-01	BRACKET (ADJUSTMENT A)		83	7-685-647-79	SCREW +BTP 3X10 TYPE2 N-S	
55	*4-926-326-01	BRACKET (PRESS PULLEY)		84	7-682-547-09	SCREW +BTP 3X6 (S)	
56	1-452-340-21	MAGNET		85	4-921-029-01	YOKE, CHUCKING	
57	4-921-022-01	PULLEY, CHUCKING		86	9-911-841-XX	CUSHION	
58	4-924-421-01	SPRING (C), TENSION		87	4-930-573-01	CUSHION	
59	*4-885-838-00	(EXCEPT US:MADE IN JAPAN)...LABEL, CLASS 1		902	*1-634-978-11	(MADE IN FRANCE)...PC BOARD, P.T.	
60	*4-914-253-01	(EXCEPT US:MADE IN FRANCE)...LABEL, CLASS 1		903	*1-635-059-11	(MADE IN JAPAN)...PC BOARD, P.T.	
61	3-664-304-11	BELT, MOTOR		904	*1-634-982-11	(MADE IN FRANCE)...PC BOARD, SENSOR	
62	4-937-969-01	WASHER, STOPPER		905	*1-635-063-11	(MADE IN JAPAN)...PC BOARD, SENSOR	
63	4-930-531-01	TABLE (C), DISK		906	*1-634-980-11	(MADE IN FRANCE)...PC BOARD, PIN JACK	
64	4-926-307-01	WASHER		907	*1-635-061-11	(MADE IN JAPAN)...PC BOARD, PIN JACK	
65	4-924-406-62	(BLACK)...TABLE (A), DISK		917	*1-551-188-XX	(E).....CORD, POWER	
66	4-924-406-72	(GRAY)...TABLE (A), DISK		918	*1-551-478-00	(US).....CORD, POWER	
67	*X-4924-409-1	SHAFT (ROLLER B) ASSY		919	*1-555-795-00	(AEP:MADE IN JAPAN).....CORD, POWER	
68	*X-4924-410-1	BRACKET (ROLLER) ASSY		920	*1-574-127-11	(AEP:MADE IN FRANCE)...CORD, POWER	
69	*X-4924-408-3	COLLAR (ROLLER) ASSY		921	*1-574-390-11	(UK:MADE IN FRANCE)...CORD, POWER	
70	*X-4924-408-2	WASHER, STOPPER		922	*1-574-904-11	(Australian)...CORD, POWER	
71	*X-4924-408-1	WASHER, STOPPER		923	*1-535-416-00	TERMINAL	
72	*X-4924-402-1	BRACKET (A) ASSY		924	*1-569-007-11	(E)...ADAPTOR, CONVERSION 2P	
73	*1-635-062-11	BRACKET (PC BOARD)		M701	A-4604-585-A	(MADE IN JAPAN)...MOTOR ASSY, ROTARY	
74	*4-912-962-01	COVER (1P), TERMINAL		M702	X-4604-572-A	(MADE IN FRANCE)...MOTOR ASSY, ROTARY	
75				T901	*1-449-957-11	(AEP,UK:MADE IN FRANCE).....TRANSFORMER, POWER	
76				T902	*1-449-959-11	(AEP,UK:MADE IN FRANCE).....TRANSFORMER, POWER	
77				T903	*1-449-960-11	(AEP,UK:Australian:MADE IN JAPAN).....TRANSFORMER, POWER	
78				T904	*1-450-136-11	(US).....TRANSFORMER, POWER	

### (3) CHASSIS SECTION



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
101	4-924-411-01	SPRING (A), TENSION		901	*A-4617-417-A	(C305M:MADE IN FRANCE)...MOUNTED PCB, MAIN	
102	7-685-647-79	SCREW +BTP 3X10 TYPE2 N-S		902	*A-4617-431-A	(C305M:MADE IN JAPAN)...MOUNTED PCB, MAIN	
103	4-930-528-01	PULLEY ASSY		903	*A-4617-489-A	(C301M:MADE IN FRANCE)...MOUNTED PCB, MAIN	
104	X-4924-443-1	+PSN, 2.6X6		904	*1-634-983-11	(MADE IN FRANCE)...PC BOARD, L.M.	
105	7-621-759-45	(US).....CORD, POWER		905	*1-635-064-11	(MADE IN JAPAN)...PC BOARD, L.M.	
106	*3-576-990-01	CUSHION		906	*1-634-984-11	(MADE IN FRANCE)...PC BOARD, DOWN SW	
107	4-917-519-01	LEVER, SET		907	*1-635-065-11	(MADE IN JAPAN)...PC BOARD, DOWN SW	
108	4-924-412-01	SPRING (B), TENSION		908	*1-634-985-11	(MADE IN FRANCE)...PC BOARD, OPEN/UP SW	
109	4-924-425-01	GEAR (LOADING B)		909	*1-635-066-11	(MADE IN JAPAN)...PC BOARD, OPEN/UP SW	
110	4-924-431-01	GEAR (LOADING A)		910	*1-634-986-11	(MADE IN FRANCE)...PC BOARD, CLOSE SW	
111	4-926-317-01	SCREW, STEP		911	*1-635-067-11	(MADE IN JAPAN)...PC BOARD, CLOSE SW	
112	4-926-320-01	SCREW (B), STEP		912	*1-634-987-11	(MADE IN FRANCE)...PC BOARD, TRANSLATION	
113	4-926-316-01	SHEET		913	*1-635-068-11	(MADE IN JAPAN)...PC BOARD, TRANSLATION	
114	4-924-426-01	GEAR (LOADING C)		M401	A-4608-350-A	(MADE IN JAPAN)...MOTOR ASSY, LOADING	
115	7-685-137-19	SCREW +BTP 2.6X14 TYPE2 N-S		M402	X-4604-554-A	(MADE IN FRANCE)...MOTOR ASSY, LOADING	
116	7-685-646-79	SCREW +BTP 3X8 TYPE2 N-S		Q901	8-729-140-96	TRANSISTOR 2SD774-34	
117	7-685-134-19	SCREW +BTP 2.6X8 TYPE2 NON-SLIT					
118	4-924-407-06	FRAME					
119	3-831-441-XX	CUSHION (B), CABINET					
120							
121	*4-926-354-01	SHEET (ADHESIVE)					
122	*4-926-324-01	BRACKET (FL)					
123	*4-875-327-01	HEAT SINK					
124	7-682-547-04	SCREW +BTP 3X6 (S)					

### (4) BASE UNIT SECTION BU-5C: MODEL MADE IN JAPAN BU-5M: MODEL MADE IN FRANCE



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
151	4-917-541-01	SPRING (B) (SILVER)		161	4-917-565-01	SHAFT, SLED	
152	4-917-508-01	HOLDER, SP		162	4-924-445-01	BARCKET (BU)	
153	7-685-135-19	SCREW +P 2.6X10 TYPE2 NON-SLIT		915	*1-632-170-11	(MADE IN JAPAN)...PC BOARD, SL/SP MOTOR	
154	4-918-669-01	SPRING (W) (BLACK)		916	*1-632-460-12	(MADE IN FRANCE)...PC BOARD, SL/SP MOTOR	
155	4-917-567-01	GEAR (M)					
156	4-917-564-01	GEAR (P), FLATNESS					
157	7-621-255-15	SCREW +P 2X3		916	A-8-848-127-11	DEVICE, OPTICAL KSS-210A	
158	4-917-562-01	INSULATOR		918	X-4917-523-1	BASE ASSY (SPINDLE MOTOR)	
159	4-917-567-01	GEAR (M)		M902	X-4917-504-1	MOTOR ASSY (SLED)	
160	4-917-564-01	GEAR (P), FLATNESS		S404	1-570-822-11	SWITCH, LEAF (LIMIT IN)	

## SECTION 6

### ELECTRICAL PARTS LIST

#### NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

#### CAPACITORS:

MF:  $\mu$ F, PF:  $\mu$  $\mu$ F.

#### RESISTORS

- All resistors are in ohms.
- F: nonflammable

#### COILS

- MMH: mH, UH:  $\mu$ H

#### SEMICONDUCTORS

In each case, U:  $\mu$ , for example:

UA...:  $\mu$ A..., UPA...:  $\mu$ PA...,

UPC...:  $\mu$ PC, UPD...:  $\mu$ PD...



The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
901	*A-4617-417-A	(C305M:MADE IN FRANCE) ...MOUNTED PCB, MAIN	920	*1-634-979-11	(C301M:MADE IN FRANCE) ...PC BOARD, TIMER SWITCH
	*A-4617-431-A	(C305M:MADE IN JAPAN) ...MOUNTED PCB, MAIN		*1-635-060-11	(C301M:MADE IN JAPAN) ...PC BOARD, TIMER SWITCH
	*A-4617-489-A	(C301M:MADE IN FRANCE) ...MOUNTED PCB, MAIN			
	*A-4617-490-A	(C301M:MADE IN JAPAN) ...MOUNTED PCB, MAIN	921	$\Delta$ 1-569-007-11	(E)...ADAPTOR, CONVERSION 2P
902	*1-634-978-11	(MADE IN FRANCE)...PC BOARD, P.T.	C103	1-162-294-31	CERAMIC 0.001MF 10% 50V
	*1-635-059-11	(MADE IN JAPAN)...PC BOARD, P.T.	C104	1-124-477-11	ELECT 47MF 20% 16V
903	*1-634-982-11	(MADE IN FRANCE)...PC BOARD, SENSOR	C105	1-124-477-11	ELECT 47MF 20% 16V
	*1-635-063-11	(MADE IN JAPAN)...PC BOARD, SENSOR			
904	*1-634-980-11	(MADE IN FRANCE)...PC BOARD, PIN JACK	C106	1-161-375-00	CERAMIC 0.0022MF 30% 16V
	*1-635-061-11	(MADE IN JAPAN)...PC BOARD, PIN JACK	C107	1-136-159-00	FILM 0.033MF 5% 50V
905	*1-634-983-11	(MADE IN FRANCE)...PC BOARD, L.M.	C108	1-136-153-00	FILM 0.01MF 5% 50V
	*1-635-064-11	(MADE IN JAPAN)...PC BOARD, L.M.			
906	*1-634-984-11	(MADE IN FRANCE)...PC BOARD, DOWN SW	C109	1-136-153-00	FILM 0.01MF 5% 50V
	*1-635-065-11	(MADE IN JAPAN)...PC BOARD, DOWN SW	C110	1-136-159-00	FILM 0.033MF 5% 50V
907	*1-634-985-11	(MADE IN FRANCE)...PC BOARD, OPEN/UP SW	C111	1-124-477-11	ELECT 47MF 20% 16V
	*1-635-066-11	(MADE IN JAPAN)...PC BOARD, OPEN/UP SW			
908	*1-634-986-11	(MADE IN FRANCE)...PC BOARD, CLOSE SW	C112	1-124-477-11	ELECT 47MF 20% 16V
	*1-635-067-11	(MADE IN JAPAN)...PC BOARD, CLOSE SW	C114	1-161-377-00	CERAMIC 0.0047MF 20% 16V
909	*1-634-987-11	(MADE IN FRANCE)...PC BOARD, TRANSLATION	C115	1-161-375-00	CERAMIC 0.0022MF 30% 16V
	*1-635-068-11	(MADE IN JAPAN)...PC BOARD, TRANSLATION			
910	*1-634-981-11	(MADE IN FRANCE)...PC BOARD, TACT SW	C116	1-124-902-00	ELECT 0.47MF 20% 50V
	*1-635-062-11	(MADE IN JAPAN)...PC BOARD, TACT SW	C202	1-124-927-11	ELECT 4.7MF 20% 50V
911	*1-634-988-11	(MADE IN FRANCE)...PC BOARD, POWER SW	C203	1-161-377-00	CERAMIC 0.0047MF 20% 16V
	*1-635-069-11	(MADE IN JAPAN)...PC BOARD, POWER SW			
912	*1-634-989-11	(C305M:MADE IN FRANCE) ...PC BOARD, HEADPHONE	C204	1-124-477-11	ELECT 47MF 20% 16V
	*1-635-070-11	(C305M:MADE IN JAPAN) ...PC BOARD, HEADPHONE	C205	1-161-375-00	CERAMIC 0.0022MF 30% 16V
915	*1-632-170-11	(MADE IN JAPAN)...PC BOARD, SL/SP MOTOR	C206	1-162-282-31	CERAMIC 100PF 10% 50V
	*1-632-460-12	(MADE IN FRANCE)...PC BOARD, SL/SP MOTOR			
916	$\Delta$ 8-848-127-11	DEVICE, OPTICAL KSS-210A	C207	1-124-477-11	ELECT 47MF 20% 16V
917	$\Delta$ 1-551-188-XX	(E).....CORD, POWER	C208	1-162-306-11	CERAMIC 0.01MF 20% 16V
	$\Delta$ 1-551-478-00	(US).....CORD, POWER	C209	1-164-159-11	CERAMIC 0.1MF 50V
	$\Delta$ 1-555-795-00	(AEP:MADE IN JAPAN) ....CORD, POWER, EULO PLUG			
	$\Delta$ 1-574-127-11	(AEP:MADE IN FRANCE)...CORD, POWER	C210	1-123-875-11	ELECT 10MF 20% 50V
	$\Delta$ 1-574-390-11	(UK:MADE IN FRANCE)....CORD, POWER	C211	1-136-165-00	FILM 0.1MF 5% 50V
	$\Delta$ 1-574-904-11	(Australian).....CORD, POWER	C212	1-124-927-11	ELECT 4.7MF 20% 50V
918	X-4917-523-1	BASE ASSY (SPINDLE MOTOR)	C213	1-136-159-00	FILM 0.033MF 5% 50V
919	1-535-416-00	TERMINAL	C214	1-136-165-00	FILM 0.1MF 5% 50V
			C215	1-162-291-31	CERAMIC 560PF 10% 50V
			C216	1-161-375-00	CERAMIC 0.0022MF 30% 16V
			C217	1-124-477-11	ELECT 47MF 20% 16V
			C218	1-124-477-11	ELECT 47MF 20% 16V
			C219	1-124-477-11	ELECT 47MF 20% 16V
			C220	1-124-791-11	ELECT 1MF 20% 50V
			C221	1-164-159-11	CERAMIC 0.1MF 50V
			C222	1-164-159-11	CERAMIC 0.1MF 50V
			C223	1-124-791-11	ELECT 1MF 20% 50V
			C250	1-164-159-11	(MADE IN FRANCE) ...CERAMIC 0.1MF 50V
			C251	1-164-159-11	(MADE IN FRANCE) ...CERAMIC 0.1MF 50V
			C301	1-124-477-11	ELECT 47MF 20% 16V





Ref.No.	Part No.	Description			
C303	1-136-159-00	FILM	0.033MF	5%	50V
C304	1-124-902-00	ELECT	0.47MF	20%	50V
C305	1-136-153-00	FILM	0.01MF	5%	50V
C306	1-161-494-00	CERAMIC	0.022MF		25V
C307	1-162-202-31	(MADE IN FRANCE) ...CERAMIC	13PF	5%	50V
C307	1-162-207-31	(MADE IN JAPAN) ...CERAMIC	22PF	5%	50V
C308	1-162-203-31	(MADE IN FRANCE) ...CERAMIC	15PF	5%	50V
C308	1-162-207-31	(MADE IN JAPAN) ...CERAMIC	22PF	5%	50V
C313	1-124-477-11	ELECT	47MF	20%	16V
C314	1-124-477-11	ELECT	47MF	20%	16V
C320	1-136-159-00	FILM	0.033MF	5%	50V
C321	1-130-475-00	MYLAR	0.0022MF	5%	50V
C322	1-130-475-00	MYLAR	0.0022MF	5%	50V
C325	1-130-475-00	MYLAR	0.0022MF	5%	50V
C401	1-124-477-11	ELECT	47MF	20%	16V
C407	1-161-494-00	CERAMIC	0.022MF		25V
C408	1-162-294-31	CERAMIC	0.001MF	10%	50V
C409	1-162-294-31	CERAMIC	0.001MF	10%	50V
C410	1-162-306-11	CERAMIC	0.01MF	20%	16V
C411	1-162-306-11	CERAMIC	0.01MF	20%	16V
C412	1-162-306-11	CERAMIC	0.01MF	20%	16V
C413	1-162-306-11	CERAMIC	0.01MF	20%	16V
C420	1-136-159-00	FILM	0.033MF	5%	50V
C421	1-136-159-00	FILM	0.033MF	5%	50V
C430	1-136-159-00	FILM	0.033MF	5%	50V
C431	1-162-215-31	CERAMIC	47PF	5%	50V
C432	1-162-215-31	CERAMIC	47PF	5%	50V
C433	1-162-215-31	CERAMIC	47PF	5%	50V
C434	1-162-215-31	CERAMIC	47PF	5%	50V
C503	1-164-159-11	CERAMIC	0.1MF		50V
C510	1-162-291-31	CERAMIC	560PF	10%	50V
C511	1-124-478-11	ELECT	100MF	20%	25V
C521	1-126-103-11	ELECT	470MF	20%	16V
C522	1-124-443-00	ELECT	100MF	20%	10V
C550	1-162-291-31	CERAMIC	560PF	10%	50V
C551	1-124-478-11	ELECT	100MF	20%	25V
C570	1-162-291-31	(C305M)...CERAMIC	560PF	10%	50V
C571	1-162-291-31	CERAMIC	560PF	10%	50V
C580	1-162-291-31	(C305M)...CERAMIC	560PF	10%	50V
C581	1-162-291-31	CERAMIC	560PF	10%	50V
C590	1-164-159-11	(C305M)...CERAMIC	0.1MF		50V
C701	1-161-494-00	CERAMIC	0.022MF		25V
C901	1-124-887-00	ELECT	3300MF	20%	16V
C902	1-124-887-00	ELECT	3300MF	20%	16V
C903	1-124-556-11	ELECT	2200MF	20%	16V
C904	1-124-927-11	ELECT	4.7MF	20%	50V
C905	1-123-875-11	ELECT	10MF	20%	50V
C906	1-123-875-11	ELECT	10MF	20%	50V
C908	1-126-176-11	ELECT	220MF	20%	10V
C909	1-124-471-00	ELECT	1000MF	20%	6.3V
C910	1-124-572-11	ELECT	100MF	20%	63V
C912	1-123-875-11	ELECT	10MF	20%	50V
C915	1-126-103-11	ELECT	470MF	20%	16V

Ref.No.	Part No.	Description	
C1001	1-164-159-11	(MADE IN JAPAN)...CERAMIC	0.1MF 50V
C1002	1-164-159-11	(MADE IN JAPAN)...CERAMIC	0.1MF 50V
CN101	*1-564-710-11	PIN, CONNECTOR (SMALL TYPE)	8P
CN103	*1-564-710-11	PIN, CONNECTOR (SMALL TYPE)	8P
CN201	*1-564-706-11	PIN, CONNECTOR (SMALL TYPE)	4P
CN401	*1-564-339-00	(MADE IN JAPAN)...PIN, CONNECTOR	5P
CN401	*1-568-954-11	(MADE IN FRANCE)...PIN, CONNECTOR	5P
CN403	*1-564-500-11	(MADE IN JAPAN)...PIN, CONNECTOR	7P
CN403	*1-568-945-11	(MADE IN FRANCE)...PIN, CONNECTOR	7P
CN407	*1-564-336-00	(MADE IN JAPAN)...PIN, CONNECTOR	2P
CN407	*1-568-951-11	(MADE IN FRANCE)...PIN, CONNECTOR	2P
CN410	*1-564-336-00	(MADE IN JAPAN)...PIN, CONNECTOR	2P
CN410	*1-568-951-11	(MADE IN FRANCE)...PIN, CONNECTOR	2P
CN411	*1-564-337-00	(MADE IN JAPAN)...PIN, CONNECTOR	3P
CN411	*1-568-952-11	(MADE IN FRANCE)...PIN, CONNECTOR	3P
CN412	*1-564-336-71	(MADE IN JAPAN)...PIN, CONNECTOR	2P
CN412	*1-568-951-31	(MADE IN FRANCE)...PIN, CONNECTOR	2P
CN502	*1-564-338-00	(MADE IN JAPAN)...PIN, CONNECTOR	4P
CN502	*1-568-953-11	(MADE IN FRANCE)...PIN, CONNECTOR	4P
CN504	*1-564-498-11	(C301M:MADE IN JAPAN) ...PIN, CONNECTOR	5P
CN504	*1-568-943-11	(C301M:MADE IN FRANCE) ...PIN, CONNECTOR	5P
CN504	*1-564-500-11	(C305M:MADE IN JAPAN) ...PIN, CONNECTOR	7P
CN504	*1-568-945-11	(C305M:MADE IN FRANCE) ...PIN, CONNECTOR	7P
CN505	*1-564-338-00	(MADE IN JAPAN)...PIN, CONNECTOR	4P
CN505	*1-568-953-11	(MADE IN FRANCE)...PIN, CONNECTOR	4P
CN701	*1-564-707-11	PIN, CONNECTOR (SMALL TYPE)	5P
CN902	*1-564-521-11	PLUG, CONNECTOR	6P
CN911	*1-564-336-00	(MADE IN JAPAN)...PIN, CONNECTOR	2P
CN911	*1-568-951-11	(MADE IN FRANCE)...PIN, CONNECTOR	2P
CN1001	*1-564-720-11	PIN, CONNECTOR (SMALL TYPE)	4P
D101	8-719-912-20	DIODE 1SS120	
D301	8-719-912-20	DIODE 1SS120	
D402	8-719-912-20	DIODE 1SS120	
D403	8-719-912-20	DIODE 1SS120	
D404	8-719-912-20	DIODE 1SS120	
D901	△.8-719-200-77	DIODE 10E2N	
D902	△.8-719-200-77	DIODE 10E2N	
D903	△.8-719-200-77	DIODE 10E2N	
D904	△.8-719-200-77	DIODE 10E2N	
D905	△.8-719-200-77	DIODE 10E2N	
D907	8-719-933-46	DIODE HZS7B1L	
D909	8-719-912-20	DIODE 1SS120	
D910	8-719-912-20	DIODE 1SS120	
D911	8-719-109-81	DIODE RD4.7ES-B2	
FL401	1-519-583-11	INDICATOR TUBE, FLUORESCENT	
IC101	8-752-034-00	IC CXA1081S	
IC201	8-752-032-30	IC CXA1082BS	
IC202	8-752-035-28	IC CXA-1291P	
IC203	8-752-035-28	IC CXA-1291P	
IC301	8-752-332-38	IC CXD1125Q	
IC302	8-759-822-79	IC LC3517RM-15	

**Note:** The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description
IC303	8-752-334-06	IC CXD2551P
IC304	8-759-990-13	IC TDA1543A
IC401	8-759-149-46	IC UPD75208CW-A46
IC402	8-749-921-24	IC GPIU52YB
IC501	8-759-945-58	IC RC4558P
IC502	8-759-601-02	(C305M)...IC M5218P
IC701	8-719-970-19	IC GPIA521
IC901	8-759-630-21	IC M5290P-16
IC902	8-759-633-42	IC M5293L
J507	1-568-519-21	(C305M)...JACK, LARGE TYPE (HEADPHONES)
J551	1-569-442-11	JACK, PIN 2P (LINE OUT)
L301	*1-410-858-11	INDUCTOR OUH
LP2	*4-352-844-01	PIN, LEAD, COATING
M401	A-4608-350-A	(MADE IN JAPAN)...MOTOR ASSY, LOADING
M401	X-4604-554-A	(MADE IN FRANCE)...MOTOR ASSY, LOADING
M701	A-4604-585-A	(MADE IN JAPAN)...MOTOR ASSY, ROTARY
M701	X-4604-572-A	(MADE IN FRANCE)...MOTOR ASSY, ROTARY
M902	X-4917-504-1	MOTOR ASSY (SLED)
PS901A	1-532-637-00	LINK, IC
PS902A	1-532-637-00	LINK, IC
Q101	8-729-801-84	TRANSISTOR 2SB1013-4
Q201	8-729-900-89	TRANSISTOR DTC144ES
Q202	8-729-900-80	TRANSISTOR DTC114ES
Q301	8-729-900-89	TRANSISTOR DTC144ES
Q302	8-729-900-65	TRANSISTOR DTA144ES
Q401	8-729-900-36	TRANSISTOR DTC124ES
Q510	8-729-900-74	TRANSISTOR DTC143TS
Q513	8-729-900-74	(C305M)...TRANSISTOR DTC143TS
Q550	8-729-900-74	TRANSISTOR DTC143TS
Q553	8-729-900-74	(C305M)...TRANSISTOR DTC143TS
Q901	8-729-140-96	TRANSISTOR 2SD774-34
Q902	8-729-111-67	TRANSISTOR 2SB1094-L
Q903	8-729-119-76	TRANSISTOR 2SA1175-HFE
R101	1-249-397-11	CARBON 22 5% 1/4W
R102	1-247-806-11	CARBON 91 5% 1/4W
R103	1-249-417-11	CARBON 1K 5% 1/4W
R104	1-249-433-11	CARBON 22K 5% 1/4W
R105	1-247-864-11	CARBON 24K 5% 1/4W
R106	1-249-441-11	CARBON 100K 5% 1/4W
R107	1-249-417-11	CARBON 1K 5% 1/4W
R108	1-249-431-11	CARBON 15K 5% 1/4W
R109	1-249-431-11	CARBON 15K 5% 1/4W
R110	1-249-425-11	CARBON 4.7K 5% 1/4W
R111	1-249-425-11	CARBON 4.7K 5% 1/4W
R201	1-249-429-11	CARBON 10K 5% 1/4W
R202	1-249-433-11	CARBON 22K 5% 1/4W
R203	1-249-414-11	CARBON 560 5% 1/4W
R204	1-249-441-11	CARBON 100K 5% 1/4W
R205	1-215-434-00	(MADE IN JAPAN)...METAL 3.6K 1% 1/6W
R205	1-247-844-11	(MADE IN FRANCE)...CARBON 3.6K 5% 1/4W
R206	1-249-441-11	CARBON 100K 5% 1/4W
R207	1-249-440-11	CARBON 82K 5% 1/4W
R208	1-247-889-00	CARBON 270K 5% 1/4W

Ref.No.	Part No.	Description
R209	1-249-435-11	CARBON 33K 5% 1/4W
R210	1-247-896-11	CARBON 510K 5% 1/4W
R211	1-249-427-11	CARBON 6.8K 5% 1/4W
R212	1-247-881-00	CARBON 120K 5% 1/4W
R213	1-249-423-11	CARBON 3.3K 5% 1/4W
R214	1-249-425-11	CARBON 4.7K 5% 1/4W
R215	1-247-882-11	CARBON 130K 5% 1/4W
R216	1-249-432-11	CARBON 18K 5% 1/4W
R217	1-249-432-11	CARBON 18K 5% 1/4W
R218	1-249-437-11	CARBON 47K 5% 1/4W
R219	1-249-435-11	CARBON 33K 5% 1/4W
R220	1-249-417-11	CARBON 1K 5% 1/4W
R221	1-249-393-11	CARBON 10 5% 1/4W
R222	1-249-393-11	CARBON 10 5% 1/4W
R223	1-249-441-11	CARBON 100K 5% 1/4W
R250	1-249-393-11	(MADE IN FRANCE)...CARBON 10 5% 1/4
R251	1-249-393-11	(MADE IN FRANCE)...CARBON 10 5% 1/4
R301	1-215-469-00	(MADE IN JAPAN)...METAL 100K 1% 1/6
R301	1-249-441-11	(MADE IN FRANCE)...CARBON 100K 5% 1/4
R302	1-215-469-00	(MADE IN JAPAN)...METAL 100K 1% 1/6
R302	1-249-441-11	(MADE IN FRANCE)...CARBON 100K 5% 1/4
R303	1-249-429-11	CARBON 10K 5% 1/4W
R304	1-249-441-11	CARBON 100K 5% 1/4W
R305	1-249-429-11	CARBON 10K 5% 1/4W
R306	1-249-433-11	CARBON 22K 5% 1/4W
R307	1-247-903-00	CARBON 1M 5% 1/4W
R308	1-249-417-11	CARBON 1K 5% 1/4W
R309	1-249-417-11	CARBON 1K 5% 1/4W
R310	1-249-413-11	CARBON 470 5% 1/4W
R311	1-249-417-11	CARBON 1K 5% 1/4W
R312	1-249-415-11	CARBON 680 5% 1/4W
R313	1-249-417-11	CARBON 1K 5% 1/4W
R320	1-249-417-11	CARBON 1K 5% 1/4W
R401	1-249-429-11	CARBON 10K 5% 1/4W
R403	1-249-429-11	CARBON 10K 5% 1/4W
R404	1-249-439-11	CARBON 68K 5% 1/4W
R405	1-249-429-11	CARBON 10K 5% 1/4W
R406	1-249-429-11	CARBON 10K 5% 1/4W
R407	1-249-429-11	CARBON 10K 5% 1/4W
R408	1-249-433-11	CARBON 22K 5% 1/4W
R409	1-249-433-11	CARBON 22K 5% 1/4W
R410	1-249-433-11	CARBON 22K 5% 1/4W
R411	1-249-433-11	CARBON 22K 5% 1/4W
R412	1-247-889-00	CARBON 270K 5% 1/4W
R413	1-247-884-11	CARBON 160K 5% 1/4W
R414	1-247-889-00	CARBON 270K 5% 1/4W
R415	1-247-883-00	CARBON 150K 5% 1/4W
R416	1-247-881-00	CARBON 120K 5% 1/4W
R417	1-247-883-00	CARBON 150K 5% 1/4W
R418	1-247-882-11	CARBON 130K 5% 1/4W
R419	1-247-883-00	CARBON 150K 5% 1/4W
R420	1-249-429-11	CARBON 10K 5% 1/4W
R421	1-249-429-11	CARBON 10K 5% 1/4W
R422	1-249-429-11	CARBON 10K 5% 1/4W



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Ref.No.	Part No.	Description
R423	1-249-429-11	CARBON 10K 5% 1/4W
R424	1-249-429-11	CARBON 10K 5% 1/4W
R425	1-249-417-11	CARBON 1K 5% 1/4W
R430	1-249-433-11	CARBON 22K 5% 1/4W
R431	1-249-433-11	CARBON 22K 5% 1/4W
R501	1-249-437-11	CARBON 47K 5% 1/4W
R503	1-249-421-11	CARBON 2.2K 5% 1/4W
R504	1-249-441-11	CARBON 100K 5% 1/4W
R510	1-249-422-11	CARBON 2.7K 5% 1/4W
R511	1-247-891-00	CARBON 330K 5% 1/4W
R512	1-249-419-11	CARBON 1.5K 5% 1/4W
R514	1-249-405-11	CARBON 100 5% 1/4W
R515	1-249-402-11	(C305M)...CARBON 56 5% 1/4W
R550	1-249-422-11	CARBON 2.7K 5% 1/4W
R551	1-247-891-00	CARBON 330K 5% 1/4W
R552	1-249-419-11	CARBON 1.5K 5% 1/4W
R554	1-249-405-11	CARBON 100 5% 1/4W
R555	1-249-402-11	(C305M)...CARBON 56 5% 1/4W
R701	1-249-416-11	CARBON 820 5% 1/4W
R901	1-249-437-11	CARBON 47K 5% 1/4W
R902	1-249-429-11	CARBON 10K 5% 1/4W
R903	1-249-438-11	CARBON 56K 5% 1/4W
R904	1-249-425-11	CARBON 4.7K 5% 1/4W
R905	1-249-425-11	CARBON 4.7K 5% 1/4W
R906	1-249-410-11	CARBON 270 5% 1/4W
R914	1-249-423-11	CARBON 3.3K 5% 1/4W
R1001	1-249-393-11	(MADE IN JAPAN)...CARBON 10 5% 1/4W
R1002	1-249-393-11	(MADE IN JAPAN)...CARBON 10 5% 1/4W
RV1	1-228-995-00	RES, ADJ, CARBON 22K
RV2	1-228-993-00	RES, ADJ, CARBON 4.7K
RV3	1-228-995-00	RES, ADJ, CARBON 22K
RV4	1-228-995-00	RES, ADJ, CARBON 22K
RV5	1-228-990-00	RES, ADJ, METAL GLAZE 1K
RV501	1-241-031-11	(C305M)...RES, VAR, CARBON 1K/1K(LEVEL)
S1	1-554-303-21	SWITCH, KEY BOARD (CONTINUE)
S2	1-554-303-21	SWITCH, KEY BOARD (SHUFFLE)
S3	1-554-303-21	SWITCH, KEY BOARD (PROGRAM)
S4	1-554-303-21	SWITCH, KEY BOARD (TIME)
S5	1-554-303-21	SWITCH, KEY BOARD (▶▶)
S6	1-554-303-21	SWITCH, KEY BOARD (◀◀)
S7	1-554-303-21	SWITCH, KEY BOARD (■)
S8	1-554-303-21	SWITCH, KEY BOARD (▶▶)
S9	1-554-303-21	SWITCH, KEY BOARD (OPEN/CLOSE)
S10	1-554-303-21	SWITCH, KEY BOARD (DISK SKIP)
S11	1-554-303-21	SWITCH, KEY BOARD (REPEAT)
S12	1-554-303-21	SWITCH, KEY BOARD (TIME FADE)

Ref.No.	Part No.	Description
S401	1-571-677-11	SWITCH, PUSH (1 KEY)(CLOSE)
S402	1-571-300-11	SWITCH, ROTARY (OPEN/BU-UP)
S403	1-571-453-11	SWITCH, LEVER SLIDE (BM-DOWN)
S404	1-570-822-11	SWITCH, LEAF (LIMIT IN)
S901	△1-571-305-11	SWITCH, PUSH (1 KEY)(POWER)
S902	1-570-707-21	SWITCH, SLIDE (TIMER)
S910	△1-571-722-11	(E)...SWITCH, VOLTAGE SELECTION (VOLTAGE SELECTOR)
T901	△1-449-957-11	(AEP,UK:MADE IN FRANCE) ...TRANSFORMER, POWER
T901	△1-449-959-11	(E).....TRANSFORMER, POWER
T901	△1-449-960-11	(AEP,UK,Australian:MADE IN JAPAN) ....TRANSFORMER, POWER
T901	△1-450-136-11	(US).....TRANSFORMER, POWER
X301	1-567-908-11	(MADE IN JAPAN)...VIBRATOR, CRYSTAL 16.9MHz
X301	1-577-328-11	(MADE IN FRANCE)...VIBRATOR, CRYSTAL 16.9MHz
X401	1-577-358-21	VIBRATOR, CERAMIC 4MHz

## ACCESSORY & PACKING MATERIAL

1-559-533-11	CORD, CONNECTION
3-751-430-11	(AEP,E,Australian:MADE IN JAPAN) ...MANUAL, INSTRUCTION
3-751-430-21	(C301M:US).....MANUAL, INSTRUCTION
3-751-430-41	(AEP:MADE IN JAPAN)...MANUAL, INSTRUCTION
3-751-430-51	(AEP,UK:MADE IN FRANCE) ...MANUAL, INSTRUCTION
3-751-430-61	(AEP:MADE IN FRANCE)...MANUAL, INSTRUCTION
*3-795-629-11	(AEP:MADE IN JAPAN)...INSTRUCTION
*3-795-629-41	(AEP:MADE IN FRANCE)...INSTRUCTION
*4-930-516-01	(MADE IN JAPAN)...CUSHION (LEFT)
*4-930-517-01	(MADE IN JAPAN)...CUSHION (RIGHT)
*4-930-962-01	(MADE IN FRANCE)...CUSHION (FRONT)
*4-930-962-01	(MADE IN FRANCE)...CUSHION (REAR)
*4-937-960-01	(C305M:MADE IN FRANCE)...INDIVIDUAL CARTON
*4-937-961-01	(C305M:MADE IN JAPAN)...INDIVIDUAL CARTON
*4-937-960-11	(C301M:MADE IN FRANCE)...INDIVIDUAL CARTON
*4-937-961-11	(C301M:MADE IN JAPAN)...INDIVIDUAL CARTON

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